

White River Glades and Woodlands

Conservation Opportunity Area



Ozark
Highlands



The White River Glades and Woodlands Conservation Opportunity Area contains one of the largest complex of dolomite glades in North America.

Jeremy Kolaks, Missouri Department of Conservation

Our hills ain't high, but our hollers sure are deep. At least that's how early settlers of southwest Missouri described their grand hills and hollows. For more than 250 million years, the land surface was exposed to the weather, while the rest of the state was covered by alternating glaciers, seas and floods. Uplifting rock, followed by stream erosion, created the region's winding hollows, steep cliffs, caves and springs. Early explorers described the landscape as a mix of open parklands, glades and woodlands.

The U.S. Forest Service owns much of the eastern portion of the White River Glades and Woodlands Conservation Opportunity Area (COA) including the Hercules Glades Wilderness Area and Glade Top Trail Scenic Byway. Glades cover local hilltops, although many have overgrown with cedar trees in the absence of periodic fires. Many valleys that were formerly timbered in oak woodlands have been cleared for pasture.

The western portion of the Conservation

Opportunity Area is dominated by rolling oak savannas and woodlands, with a smaller proportion of glades. Lower slopes and valleys in this landscape were historically wooded, and stands of giant cane were once common along streams. This area is mostly privately owned, although there are also large public land holdings at Drury-Mincy Conservation Area and Bull Shoals Lake.

The large glade and woodland complexes present within the White River Glades and Woodlands COA support a variety of wildlife, including species of conservation concern such as Bachman's sparrows, painted buntings and eastern collared lizards. The landscape also supports a number of glade and woodland plants such as Cherokee sedge, pale gerardia, stenosisiphon, and Trelease's larkspur. Small populations of the state endangered Swainson's warbler persist in scattered cane breaks along streams, offering restoration potential for riparian habitats.

White River Glades and Woodlands Conservation Strategies:

- Increase the connectivity and quality of glade, savanna and woodland habitats, emphasizing locations known to support species of conservation concern.
- Improve water quality through the protection of riparian habitats, sinkholes and losing streams.
- Control unwanted invasive plant and animal populations to the maximum extent possible (e.g. sericea lespedeza, tall fescue, eastern red cedar, feral hogs).
- Increase opportunities to work with willing private landowners on fescue conversion, grazing management, cost share, etc.



Jim Rathert, Missouri Department of Conservation

*The **smoke tree** grows on glades in four counties of southwestern Missouri. When the salmon-colored blossoms drop off, the colorful, hairy stalks remain, giving the tree the smoky look that provides its name. The foliage of smoke tree also displays brilliant orange and red autumn color.*

Priority Research and Inventory Needs

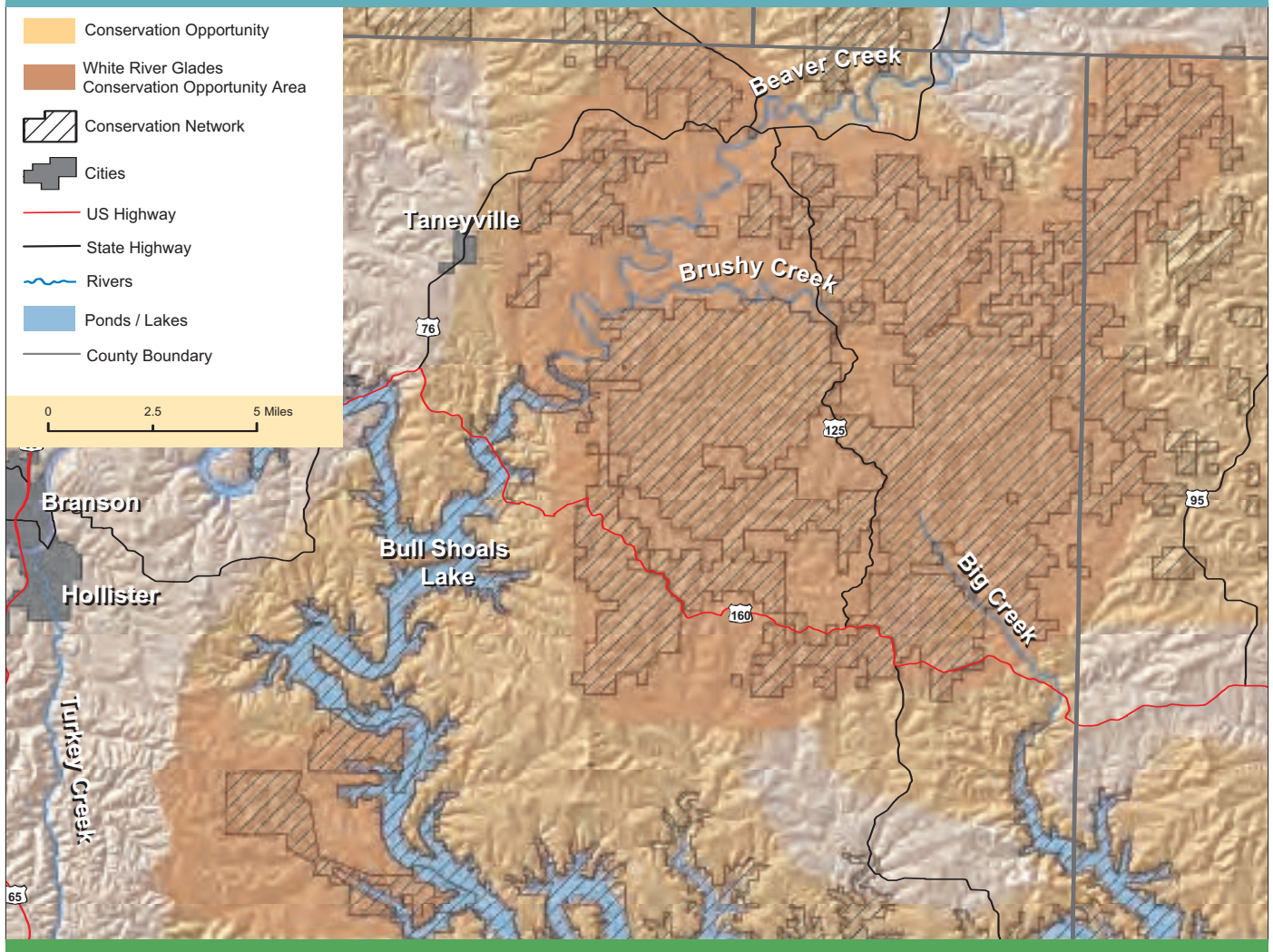
- Determine an appropriate fire management regime for habitat restoration.
- Conduct a land inventory to determine public-private connections.
- Update species and community occurrences in the heritage database.
- Inventory karst features and losing stream segments.
- Conduct research to determine the best methods for long-term control of sericea lespedeza.

Conservation Partners

Existing: Audubon Missouri; Greater Ozarks Audubon Society; Tumbling Creek Cave Foundation; Missouri State University's (MSU) Bull Shoals Field Station; National Wild Turkey Federation (NWTf); Southwest Missouri Resource Conservation and Development; South Missouri Water Quality Project; U.S. Forest Service (USFS); Missouri Department of Conservation (MDC)

Potential: Ozark Regional Land Trust; Central Hardwoods Joint Venture; The Nature Conservancy – Arkansas and Missouri Chapters; Cave Research Foundation; Missouri Bass Angler Sportsmen Society; Missouri Conservation Heritage Foundation (MCHF); private landowners; Natural Resources Conservation Service (NRCS); U.S. Army Corps of Engineers (USACE)

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Funding Sources

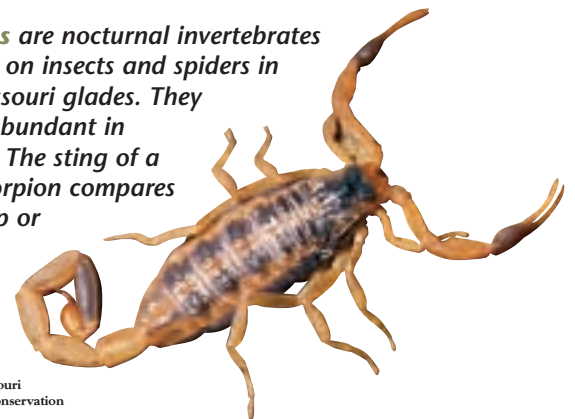
Existing: MDC annual budget; USFS annual budget; Farm Service Agency Conservation Reserve Program; NRCS Environmental Quality Incentives Program; NRCS Wildlife Habitat Incentive Program; NWTf Wild Turkey Super Fund; Taney County Soil and Water Conservation District State Cost Share Funds; Missouri Bird Conservation Initiative Grants; L-A-D Foundation Grant

Promising Future Sources: National Fish and Wildlife Foundation Grants; MDC Landowner Incentive Program; MDC State Wildlife Grants; MDC Wildlife Diversity Funds; MDC Private Lands Cost Share; MCHF Stream Stewardship Trust Fund; USACE Section 1135 Program

Existing Conservation Network

Mark Twain National Forest – Ava District (Hercules Glades Wilderness Area, Glade Top Trail Scenic Byway, Haden Bald Natural Area); Drury-Mincy Conservation Area (MSU Bull Shoals Field Station); Bull Shoals Lake

Scorpions are nocturnal invertebrates that feed on insects and spiders in some Missouri glades. They are not abundant in Missouri. The sting of a wood scorpion compares to a wasp or bee.



Jim Rathert, Missouri Department of Conservation

Conserving Woodlands



Open woodlands surround glades. Low-intensity fires keep woodlands open and able to support a groundcover of grasses and wildflowers.

Jeremy Kolaks, Missouri Department of Conservation

Conservation Challenges

Eastern red cedars have invaded most glades and woodlands in the White River Glades and Woodlands COA. Restoring dolomite glade and woodland complexes with their associated wildlife is a principle challenge. Careful use of prescribed fire is essential. Obstacles to conservation success may include increased urbanization and development, difficulty accessing areas in need of

habitat work, smoke management concerns, increasing numbers of invasive and exotic species, increasing illegal use of ATVs and dirt bikes, lack of data on best methods for measuring water quality, public perception and habitat management restrictions associated with the Hercules Glades Wilderness designation.

To learn more about the White River Glades and Woodlands Conservation Opportunity Area, please contact:



Missouri Department of Conservation
Wildlife Division
P.O. Box 180
Jefferson City, MO 65102-0180